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The Good, The Bad and The Ugly: Using APIs to develop reading list software at the University of Huddersfield

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Using APIs to develop reading list software at the University of Huddersfield

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University of Huddersfield, UK
The back story...

- Once upon a time in the West...

There were three men in her life. One to take her... one to love her – and one to kill her.

A SERGIO LEONE FILM
CLAUDIA CARDINALE
HENRY FONDA
JASON ROBARDS
CHARLES BRONSON

ONCE UPON A TIME IN THE WEST
Once upon a time in West Yorkshire, UK

...the University of Huddersfield had a lot of courses

...each course contained several modules

...most modules had a list of required, recommended and background reading (books, articles, web sites, etc)
some academics don't check if the students can access the items on their lists in the library
some academics don't update the books on their reading lists to the latest edition
many academics forget to send a copy of the reading list to the library
students get p*ssed off when the library fails to provide access to the reading list items
it gets **real** ugly when 300 students try to get hold of the **only** copy of the book in the library
time for the library
to be the good guys :-)

the good
• Reading list software developed in-house
• Launched in summer 2011
• Over 98% of all active modules now have a reading list in MyReading
• Most academics are using the software to maintain their reading lists
1 - Essential Reading

Chadwick, Simon and Beech, John G. (2007) - The marketing of sport

2 - Supplementary Reading

Fullerton, Sam (2010) - Sports marketing (2nd ed)


Smith, Aaron (2008) - Introduction to sport marketing


Wakefield, Kirk L. (2007) - Team sports marketing
1 - Essential Reading

Chadwick, Simon and Beech, John G. (2007) - The marketing of sport

Links:
- DawsonEra (electronic book)

Library holdings:
- Huddersfield: 3 copies (all available now)

Bibliographic details:
- published in 2007 by Financial Times Prentice Hall (Harlow)
- shelfmark: 796.0698 MAR
- ISBNs: 9780273688266 / 9781405898812

Library Catalogue - all editions and related works:
- The marketing of sport (2007) - edited by Beech, John G.

Purchase options:
- Amazon.co.uk - £44.79 (paperback, 1st ed., 2006)
The requirements...

- The software had to: 
  - give students electronic access to as much material as possible
  - provide the library with purchasing data
  - automate as much as possible
  - be easy for academics to use
  - integrate with other systems
THE GOOD
#1 SUMMON
The problem...

- We need to make MyReading easier to use than updating a Word document
- Getting accurate metadata is hard and we want to make the references as rich as possible
- We need reliable full-text links
• MyReading is integrated into the Summon interface (using jQuery)
• Academics can quickly add items to their reading lists from the 132 million items in our Summon collection
  ...or from the 791 million items in the full Summon index
Cities of Flanders: **Ghent**: Sweet secrets: You never know quite what to expect in **Ghent**, with its quirky customs, secret recipes and long-hidden treasure

by Jane E Knight


.... It's a treasure hunt that has attracted many, but like other things in **Ghent**, it still remains a mystery...

Newspaper Article: Full Text Online
It doesn't take long to expect the unexpected in Ghent, a city sometimes left off the traditional tourist trail in favour of Bruges's beauty and Antwerp's...
Please check the item reference for accuracy...

*fields in red are mandatory*
*fields in green affect how the software displays the reference and should be altered with caution*

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<td>Jane E Knight</td>
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<td>23/11/2002</td>
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<tr>
<td>publisher name:</td>
<td>Guardian News &amp; Media Limited</td>
</tr>
<tr>
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ISSN (print): 0261-3077

ISSN (electronic): 
Journal article » recommended reading


**Links (show more):**
- article link (via Summon)

**Article details:**
- page: 5
- date: 23/11/2002

**Article abstract from Summon:**
- It doesn't take long to expect the unexpected in Ghent, a city sometimes left off the traditional tourist trail in favour of Bruges's beauty and Antwerp's attitude. For Ghent not only ... [read more]

**Journal details:**
- The Guardian
- ISSN: 0261-3077 (print)
- publisher: Guardian News & Media Limited (London (UK))
In November 1893 the Cutter's Gazette of Fashion, a prominent trade periodical for tailors, published the comments of a T. Patterson delivered before the Sheffield Society. In his address, Patterson celebrated the robust state of London's men's tailoring and extolled the modern advances that had allowed its proliferation throughout the provinces and the Continent. Shannon examines how men, masculinity, and male consumption were imagined in the discourse of the burgeoning commodity culture and fashion industry, and how this discourse operated against, and alongside of, the Great Masculine Renunciation's more conservative promotion of sartorial reserve and repudiation of consumer desire in Britain between 1860 and 1914.
#2 xISBN
The problem...

- Some academics don’t list the latest edition of a book on their reading list
- The library routinely buys new editions of popular books and gets rid of the older editions
OCLC xISBN
www.oclc.org/developer/services/xisbn

• Provides details of related editions, including basic metadata
• Free for up to 500 requests per day
• Ideal for linking together different editions of the same title
Tungate, Mark (2005) - Fashion brands: branding style from Armani to Zara

Links:
- Ebrary (electronic book)

Library holdings:
- Huddersfield: 4 copies (all available now)

Bibliographic details:
- published in 2005 by Kogan Page (Sterling, Va, London)
- shelfmark: 687.0688 TUN
- ISBN: 9780749442996

Library Catalogue - all editions and related works:
- Fashion brands: branding style from Armani to Zara (2nd ed, 2008) - Tungate, Mark
- Fashion brands branding style from Armani to Zara (2005) - Tungate, Mark [electronic book]
- Fashion brands: branding style from Armani to Zara (2005) - Tungate, Mark

Purchase options:
- search Amazon.co.uk
- search AbeBooks UK

Welters, L. and Lillehun, A. (2011) - The fashion reader (2nd ed)

Welters, Linda and Lillehun, Abby (2011) - The fashion reader (2nd ed)
Tongue, Mark (2005) - Fashion brands : branding style from Armani to Zara

[private note from the library] A newer edition from 2008 is listed on the library catalogue.

Welters, L. and Lillethun, A. (2011) - The fashion reader (2nd ed)

Welters, Linda and Lillethun, Abby (2011) - The fashion reader (2nd ed)
#3
360 LINK
The problem...

- Linking to articles is a pain in the ass!
- Academics don’t understand URLs with session IDs, authentication issues, etc
- Legal issues around hosting article PDFs
- Library subscriptions and journal platforms keep changing
• You’ve paid for a link resolver, so why not use it? ;-)  
• 360 Link API provides current access options and basic metadata for a given OpenURL as XML

**Article abstract from Summon:**

H. G. Wells' novel "The Invisible Man" (1897) and its title character in particular can be seen as a satire of the flamboyant and contentious public persona of James McNeil Whistler. ...

**Journal details:**

- Oxford Art Journal
- ISSN: 0142-6540 (print) & 1741-7287 (electronic)
No subscription found for this journal
#4
COPAC
The problem...

- Getting good metadata for books the library doesn’t have in stock
- Academics often want to add books that they have sitting on the shelf in their office
• Academics can type in an ISBN
• MyReading checks library catalogue first
• If not held in stock, we check COPAC
• See also:
  – OCLC WorldCat Search API
  – Amazon APIs
  – Perl WWW::Scraper::ISBN modules
#5 DOI
The problem...

- An academic wants to add a reference manually but we want to avoid bad metadata, typos, etc
- If the academic has a DOI for the reference, we can check CrossRef to get accurate metadata
The Bad
products with NO APIs
products without a free API
products with hard to use APIs
#1
THE OPAC
1. **101 Windows phone 7 apps**
   by Nathan, Adam. 1977-
   Indianapolis, Ind. : London : Sams ; Pearson Education [distributor], 2011.
   004.165 NAT

2. **2007 Microsoft Office system inside out**
   by Boyce, Jim, 1958-. Pierce, John, 1964-
   Format: electronic book (DawsonEra)

3. **Access 2003 programming by example with VBA, XML, and ASP**
   by Korol, Julitta.
   005.7565 KOR

4. **Access 2003 programming by example with VBA, XML, and ASP**
   by Korol, Julitta.
&GetXML=true
#2
DATA
Issues around data

*aka “The Can o’ Worms”*

- Data ownership
- Data use, reuse and remixing
- Can we still make use of the data we’ve already collected/harvested if we cancel the vendor product?
Usage Restrictions

Some restrictions on usage will be imposed. The exact specification of these has yet to be determined.

Access and Authentication

Access and Query Types

The base URL for this operation is

http://<client identifier>.openurl.xml.serialssolutions.com/openurlxml

Both HTTP POST and GET requests are supported.

Usage Restrictions

Some restrictions on usage will be imposed. The exact specifications have not yet been determined.
#3 STANDARDS
Summary

• APIs allow developers to enrich existing library services and to rapidly develop new ones

• APIs allow you to “glue” together different services and products, and this then allows data to flow
• When purchasing new products, remember to ask the vendor...
  – does it have an fully-featured API?
  – is the product itself built on top of the API?
  – is the documentation publicly available?
  – what have other libraries developed using your API?
That’s all folks!

Thank you for listening 😊

• email:  d.c.pattern@hud.ac.uk
• tweet:  @daveyp

• images taken from various trailers for The Good, The Bad and The Ugly (1966), directed by Sergio Leone